

MassDEP C&D Subcommittee

One Winter Street, Boston

October 30, 2019 10:00 AM to 12:00 PM



Agenda

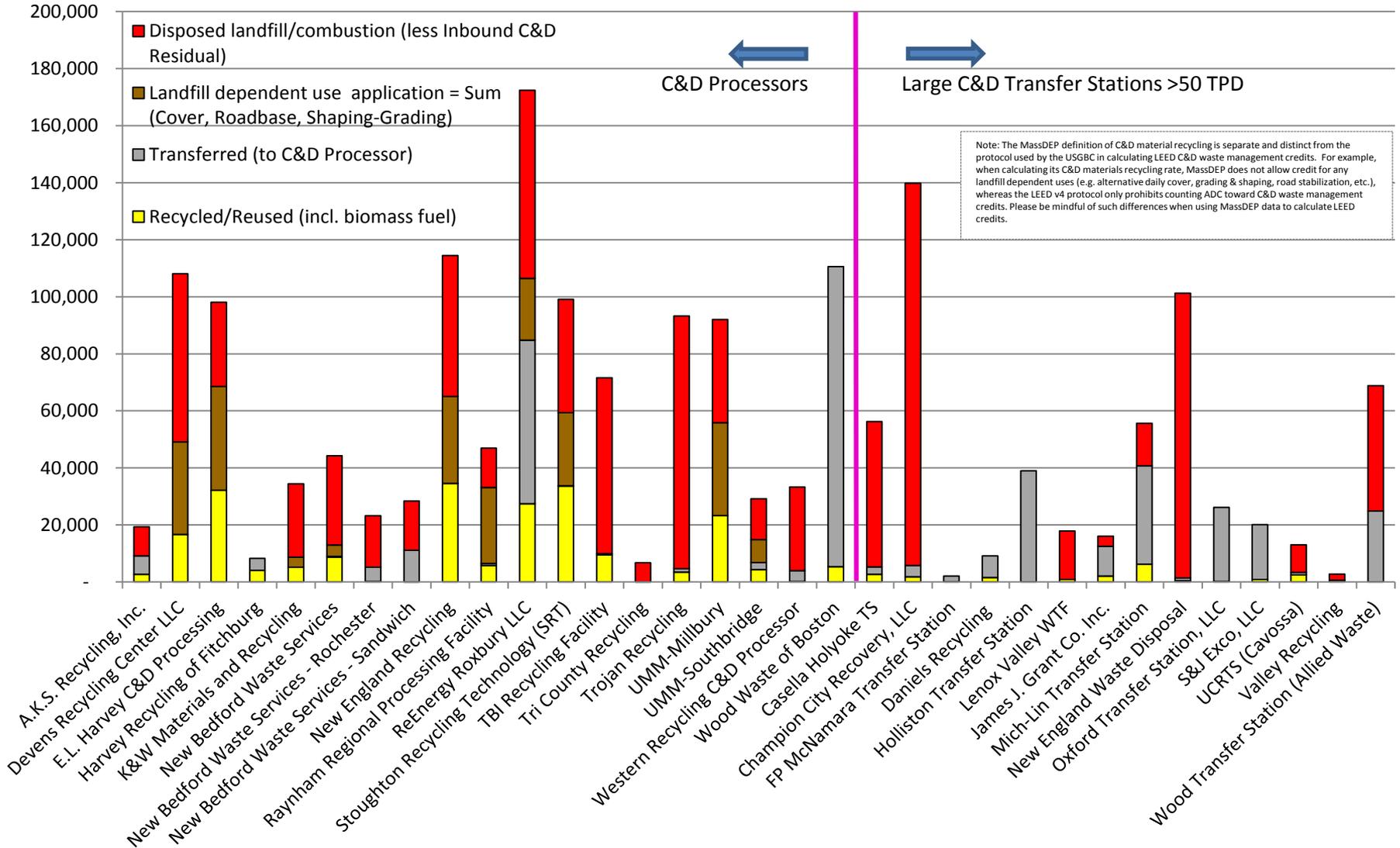
- Welcome/Safety/Introductions
- 2018 C&D Facility Annual Report Summary Data
- Proposed Minimum Performance Standards for
C&D Handling Facilities
- Announcements/Updates

CY2018 C&D Annual Report Summary Data

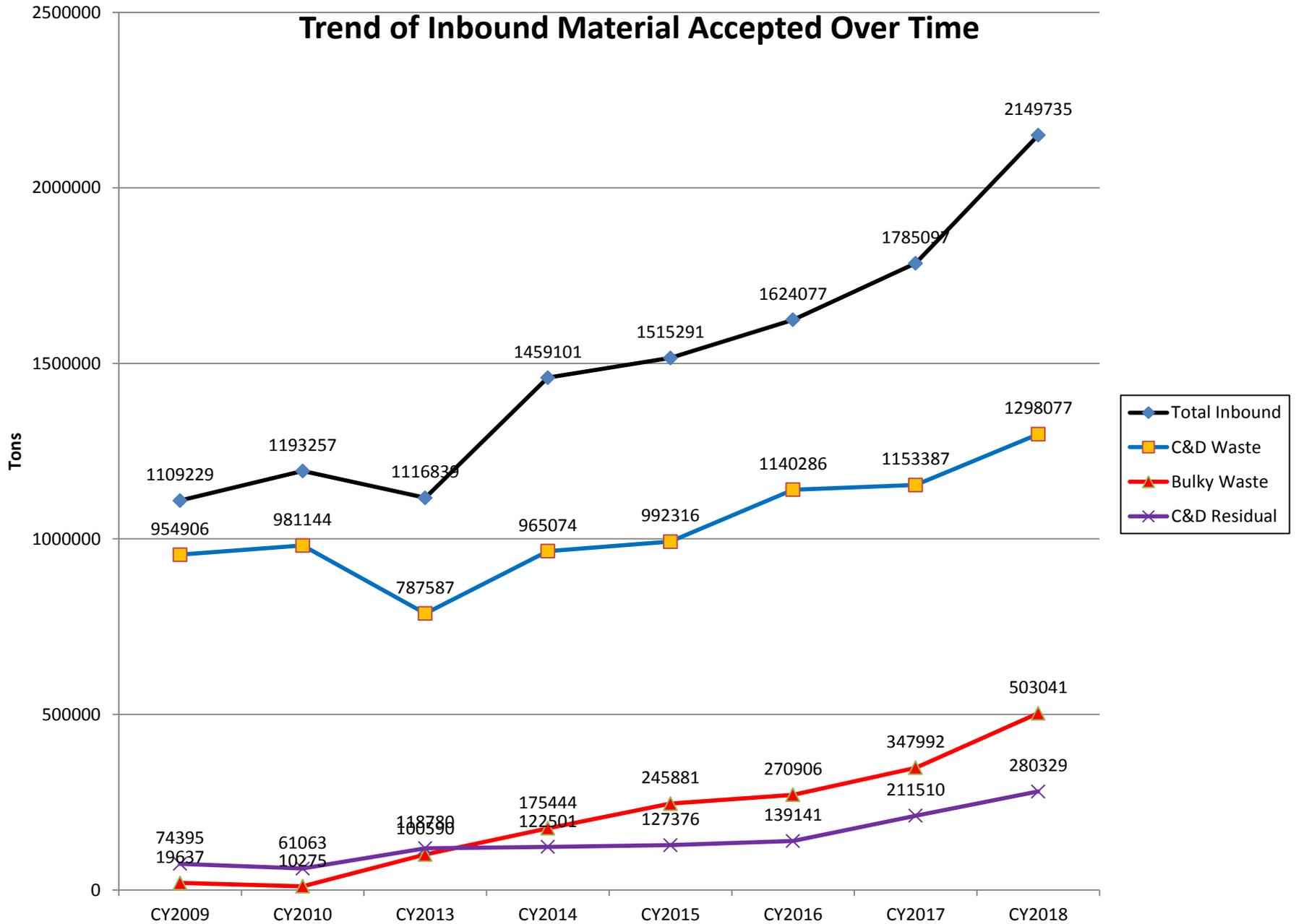
- Massachusetts C&D Handling Facilities -

Tons of C&D Accepted and Handled by Facility in 2018*

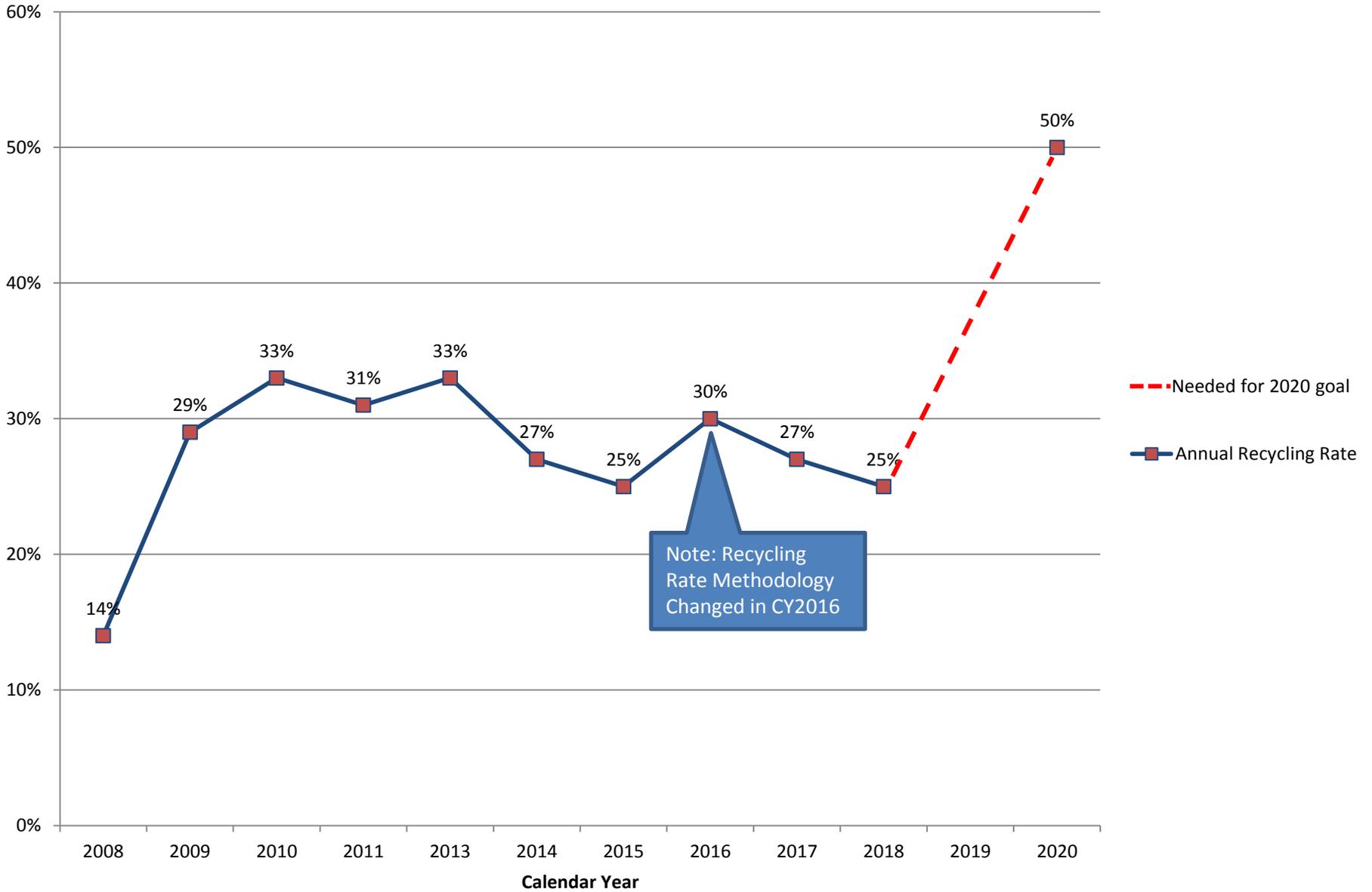
*Quantities are "as reported" to MassDEP in CY2018 C&D Annual Facility Reports



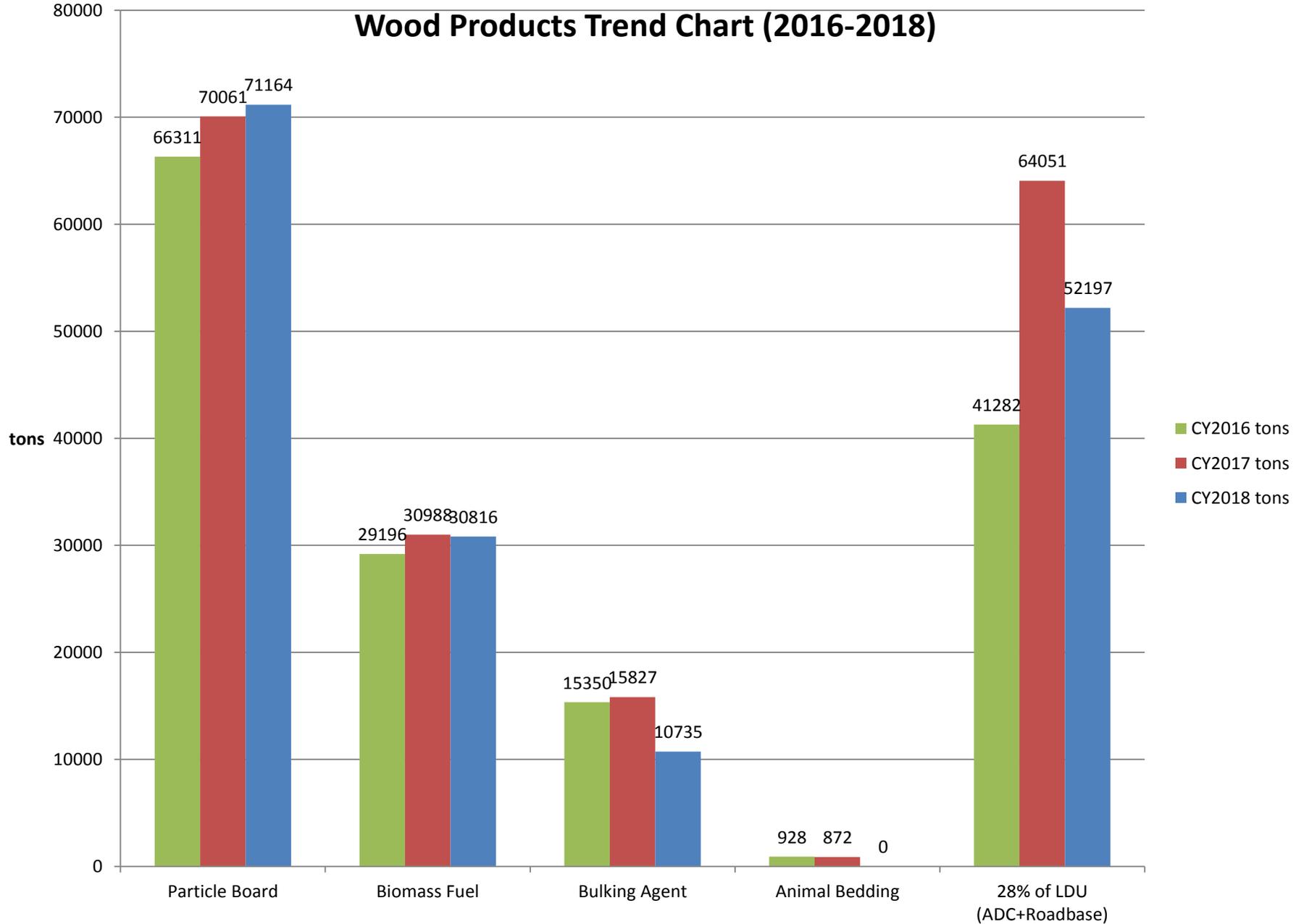
Trend of Inbound Material Accepted Over Time



C&D Annual Recycling Rate Trend Chart



Wood Products Trend Chart (2016-2018)



CY2018 Other Processed Materials Recovered

	CY2018		
Facility	Gypsum Recovered	C&D Waste Accepted	% of Total accepted
E.L. Harvey	609	83113	0.73%
NER	350	112199	0.31%
Harvey Fitchburg	146	5184	2.82%
Raynham	37	47266	0.08%
UMM-Millbury	24	72664	0.03%
Trojan	17	29092	0.06%
UMM-Southbridge	14	19879	0.07%
SRT	12	68805	0.02%
AKS	0	34743	0.00%
Devens	0	89571	0.00%
K&W	0	28715	0.00%
NBWS	0	15206	0.00%
NBWS-Rochester	0	4920	0.00%
NBWS-Sandwich	0	11086	0.00%
RER	0	133019	0.00%
TBI	0	30644	0.00%
Tri County	0	744	0.00%
Western	0	8336	0.00%
Wood Waste	0	105002	0.00%
Total	1209		

Clean Gypsum Wallboard - 1209 tons

	CY2018		
Facility	Asphalt Shingles Recovered	C&D Waste Accepted	% of Total accepted
Harvey Fitchburg	2759	5184	53.22%
E.L. Harvey	179	83113	0.22%
Trojan	67	29092	0.23%
NER	19	112199	0.02%
AKS	0	34743	0.00%
Devens	0	89571	0.00%
K&W	0	28715	0.00%
NBWS	0	15206	0.00%
NBWS-Rochester	0	4920	0.00%
NBWS-Sandwich	0	11086	0.00%
Raynham	0	47266	0.00%
RER	0	133019	0.00%
SRT	0	68805	0.00%
TBI	0	30644	0.00%
Tri County	0	744	0.00%
UMM-Millbury	0	72664	0.00%
UMM-Southbridge	0	19879	0.00%
Western	0	8336	0.00%
Wood Waste	0	105002	0.00%
Total	3024		

Asphalt Roofing Shingles - 3024 tons

C&D MINIMUM PERFORMANCE STANDARD POLICY

Objectives of C&D MPS Policy

- Level the “playing field”
- Create incentive to send Mixed C&D Waste preferentially to high performing C&D Handling Facilities.
- Reduce “leakage” (i.e. disposal) of inadequately processed C&D waste
- Divert banned materials from disposal to greatest extent possible
- Maximize separation of recyclable materials for further processing or recycling/reuse

Proposed C&D MPS Policy

- In order to comply with the C&D MPSP, a C&D Handling Facility must meet the following two performance criteria:
 1. Achieve minimum threshold for the Process Separation Rate (PSR);
 - Initially set PSR at 15%;
 - Ratchet up PSR over time to improve performance
 - Measure PSR as compared to **total inbound material accepted** (excluding MSW or Processed C&D Fines & Residuals received, as allowed by Operating Permit)
 2. Demonstrate that all banned materials are being separated to the greatest extent possible.
 - Facility must demonstrate separation of all C&D Waste Ban Materials (i.e. ABC, metal, wood, clean gypsum wallboard), OCC, and any other waste ban materials received by the facility.
- If a C&D facility fails to satisfy both criteria 1 and 2, then all C&D waste material must be transferred for further processing to a C&D facility that meets the C&D MPSP performance criteria

Failure to meet MPS

- Unless transferring all C&D waste to a C&D MPSP compliant facility for further processing, failure to comply with C&D MPSP constitutes a failure to comply with the Waste Ban Compliance Plan requirements (inadequate processing of C&D Waste)
 - may not dispose or arrange for disposal of any remaining C&D waste material/residues;
- Initially, increase frequency of reporting from annually to quarterly to show improvement of PSR
- Starting one year after MPS Policy launch, MassDEP may exercise options under Enforcement Response Guidelines
 - Follow progressive discipline model to encourage improvement: NONs -> HLE
 - Require facility-specific Return-to-Compliance Plans as formal commitment to corrective actions

Proposed Implementation Plan

- 10/30/2019: Preview proposed MPS policy at C&D Subcommittee Meeting
- 1/01/2020: Announce launch of C&D MPS Policy (effective date)
- 2/15/2020: CY2019 annual report data due
 - BAW-BOS begins auditing data
- 6/01/2020: BAW-BOS publishes MPSP facility status based on CY2019 data
 - Under-performing facilities begin quarterly reporting

Proposed Implementation Plan

- 2/15/2021: CY2020 annual report data due
 - BAW-BOS continues auditing data
- 6/01/2021: BAW-BOS publishes MPSP facility status based on CY2020 data
 - Under-performing facilities may be subject to enforcement
 - Progressive enforcement model (NONs -> HLE)
 - Return-to-Compliance Plans required

Process Separation Rate

- Process Separation Rate (PSR) is compared against total inbound material

Process Separation Rate

$$= \frac{(Recycled + Biomass + Diverted)}{(Total\ Inbound\ Material\ Accepted - Inbound\ Processed\ Fines\ \&\ Residuals)}$$

- Diverted material: means separation of a specific type of C&D material (e.g. C&D wood) that is then transferred for further processing (i.e. sent and received as a separated material; not mixed C&D waste).
- Diverted material does **NOT** include landfill dependent uses (e.g. ADC, Roadbase, Shaping & Grading)
- “Total Inbound Material Accepted” (in denominator): includes any inbound “C&D Waste”, “Bulky Waste” and “Source Separated Material”; excludes MSW or Processed C&D Fines & Residuals received, as allowed by Operating Permit)
- Inbound Processed Fines & Residuals can only be generated by C&D Facility that meets/exceeds MPS performance criteria
 - Need to check MPSP facility status before characterizing inbound loads of residuals

Criterion #1 PSR Minimum Threshold CY2018 Facility Status

C&D Processors

- **Meets/Exceeds 15% Threshold Criteria**
 - AKS Recycling
 - Devens Recycling
 - E.L. Harvey C&D Processing
 - Harvey Recycling of Fitchburg
 - New England Recycling
 - ReEnergy Roxbury
 - Stoughton Recycling
 - TBI Recycling
 - UMM-Millbury
 - UMM-Southbridge
 - Wood Waste of Boston
- **Below 15% Threshold Criteria**
 - K&W Recycling
 - NBWS-New Bedford
 - NBWS-Rochester
 - NBWS-Sandwich
 - Raynham Regional Processing
 - Tri County Recycling
 - Trojan Recycling
 - Western Recycling

Large C&D Transfer Stations

- **Meets/Exceeds 15% Threshold Criteria**
 - Daniels Recycling
 - UCRTS (Cavossa)
- **Below 15% Threshold Criteria**
 - Casella Holyoke TS
 - Champion City Recovery
 - FP McNamarra TS
 - Holliston TS
 - Lenox Valley WTF
 - James J. Grant
 - Mich-Lin TS
 - New England Waste Disposal
 - Oxford TS
 - S&J Exco
 - Valley Recycling
 - Wood TS (Allied Waste)

Note: This table does not reflect evaluation of Performance Criterion #2: Demonstrate that all banned materials are being separated to the greatest extent possible

Other Considerations

- All C&D Handling Facilities will be required to submit revised Waste Ban Compliance Plans consistent with C&D MPSP Performance Criteria
 - At time new WB Materials are added to SWM regulation (310 CMR 19.000), or
 - At time of ATO permit renewal, whichever comes first

ANNOUNCEMENTS/UPDATES...

CONSTRUCTION AND DEMOLITION GUIDANCE DOCUMENT & TECHNICAL ASSISTANCE



RecyclingWorks MA is funded by the MassDEP, delivered under contact by the Center for EcoTechnology.

CONSTRUCTION & DEMOLITION BEST MANAGEMENT PRACTICE OUTLINE

- Regulatory Requirements
- Waste Management Plans
- Deconstruction & Demolition
- Materials Reuse
- Recycling
- Resources



CONSTRUCTION & DEMOLITION TECHNICAL ASSISTANCE



- Free assistance with waste management plan
- Work directly with an experienced consultant
- Focused on larger scale commercial projects
- Contact RecyclingWorks to learn more!

CASE STUDY: THE COLUMNS



Collecting gypsum wallboard in a separate, covered container helped recycle 20 tons of this material.

- Transformed an underutilized property into 25 condos
- LEED Certification
- Materials collected in designated containers:
 - Masonry - 90 tons
 - Gypsum Wallboard – 20 tons
 - Cardboard – 2 tons
- Over 90% of materials from this project were recycled

QUESTIONS?

Abbey Massaro
abbey.massaro@cetonline.org
(413) 348-1640

RecyclingWorks Hotline
(888) 254-5525
info@recyclingworksma.com
recyclingworksma.com



2030 Solid Waste Master Plan

- Public Comment Draft published 9/27/2019
- Public Comment Period runs through 12/06/2019
- Posted at:
 - www.mass.gov/guides/solid-waste-master-plan
- 5 public hearings scheduled across state
- Submit comments to:
 - dep.swmp@mass.gov

2030 Solid Waste Master Plan

C&D Waste Reduction Goal (Public Comment Draft)

Goal: By 2030, reduce the disposal of C&D materials by 260,000 tons annually, based off of a 2017 baseline of estimated C&D waste managed through both MSW and C&D handling facilities. These annual disposal reductions will be advanced primarily through four strategies:

- Improve operational performance through implementation of C&D Minimum Performance Standards Policy
- C&D facility targeted grants and loans
- Target materials – wood, cardboard, gypsum
- Technical assistance and model local ordinances – source separation, deconstruction & reuse

MassDEP Recycling Business Development Grant Program (RBDG)

RBDG: Intended to enhance waste reduction and recycling programs for Massachusetts based businesses.

- Grant awards range from \$50K to \$400K for eligible projects
- Match: grantee must contribute 25% of project investment
- Performance based component extends over 18 – 24 months

CY2019 Grant Cycle

- Application found at: <https://www.mass.gov/how-to/recycling-business-development-grants>
 - CY2019 target materials include: Clean Gypsum Wallboard – processing and recycling of clean wallboard
- No applications were received by 10/04/2019 deadline

CDRA Updates

- Presented by Bill Turley, CDRA Executive Director
 - EPA/America Recycles Day
 - Recover Act
 - CDRA End Markets Committee
 - C&D World 2020



Announcements/Open Discussion

- EBCNE 14th Annual C&D Regional Summit
 - Sheraton Hotel, Framingham
 - Thursday, January 30, 2020
 - 8:00 am to 12:00 noon



<http://ebcne.org/calendar/>

Any other business to discuss?

For More Information:

Point of Contact:

Mike Elliott

Asbestos/C&D Program Coordinator

MassDEP – Bureau of Air & Waste

One Winter Street

Boston, MA 02108

michael.elliott@mass.gov

617-292-5575